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Attributes of Successful Public Participation in Planning for Sustainable Tourism in Protected Areas: A Modified Delphi Study

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ABSTRACT

Tourism in protected areas has developed and is becoming desirable attractions in many parts of the world. The expanding of the industry into the fragile and sensitive areas necessitates proper planning and management to ensure balance in development and protection of the environment. Sustainable development has become the buzz word in planning. One important principle of sustainable development is to encourage true participation of the public in planning and decision making. In this study, a modified Delphi technique was introduced to determine whether an informed group of experts in protected area management could arrive at a consensus regarding the important attributes of a successful public participation. Three expert groups representing government agencies, nongovernmental agencies, and academics in Malaysia were presented with a questionnaire containing 30 attributes in two dimensions perceived as being the important dimensions in determining a successful public participation. The contributions of individuals via this tool produced group perspective not otherwise attainable. The results from the Delphi rounds confirmed a consensus of opinion between the three categories of experts with an introduction of new attributes deemed important with reference specifically to Malaysia.

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INTRODUCTION

Natural environments such as forests and natural parks are among the most attractive places on earth for their richness

in biodiversity. These environments are important to us as they provide sustenance and foundation for social and economic development (World Bank, 2014). A lot of these natural environments have been designated as protected areas.

Protected areas are important for their roles in conserving nature's valuable flora and fauna. Many of these protected areas have also started to welcome visitors and eventually promote tourism. People enjoy the visits to protected areas in many ways including wildlife watching, hiking, and walking on natural trails. Gunn (1979) indicates that engaging in outdoor recreation in natural environment has become major travel purposes for leisure travel.

It is important to note that tourism will be one of the largest industries in the 21st century (Dowling, 2003). Thus, giving great attention in planning and management of natural environments such as these protected areas is now becoming increasingly important. The rapid growth of international travel experienced today has definitely put pressures on the management in coming up with better planning and management actions to meet tourists' expectations and demands.

Increased visitors number would increase requirement for new recreational activities and this necessitates the development of different kinds of services and facilities in the park (Puhakka, 2008). These definitely will require better infrastructure such as trails, bridge, and lodges. In addition, there will also be an

increase in demands for well-managed recreational places and educational programmes. It is argued by McCool (2009) that the increased demand would raise the stakes for decisions on tourism planning in protected areas. Adopting the principle of sustainable development in tourism planning is now the goal for many managements and governments around the world.

SUSTAINABLE TOURISM AND PUBLIC PARTICIPATION

The concept of sustainable development involves the idea that people must live within the capacity of their environment to support them, and this concept is important especially in the tourism industry as the viability of the industry depends upon the maintenance of the environment qualities (Piagram, 2000). Preserving the natural environment has become an international effort, thus the same effort is needed for tourism. It is important for tourism to be developed in a sustainable way, especially after the United Nations Conference in Rio de Janeiro in 1992. In the conference, tourism is identified as one of the five main industries in need of achieving a sustainable development (Pryce, 2001; Theobald, 1998). The Earth Summit in Rio De Janeiro in 1992 marked a history when Agenda 21 was adopted by more than 178 governments. This has led to the commitment of these governments to make travel and tourism a model industry for environmental improvement (Chiesura, 2004; Piagram, 2000).

Sustainable tourism can be regarded as the gentle form of tourism, where it is organised and conducted in a small scale and with sensitivity to the nature (Moisey & McCool, 2008). The concept takes utmost important on tourism impacts towards culture and the environment, as well as pays high attention to involvement of the local community, especially in decision making process. As the concept of park protection has undergone significant changes and evolution, the issue of sustainable tourism development needs to be addressed accordingly. Most of the times, in many literatures, sustainable development models often include stakeholder collaboration and in particular, the involvement of local community in the early stages of the development process.

This interest in the collaboration theory could be traced back to 1960s in the work of Arnstein (1969), which looked at typology of citizen participation in an urban planning initiative. Other work includes that of Hunter (1997) that describes typology of sustainable development that ranges from strong resource exploitation to strong resource preservation. He mentioned that the concept of sustainable development should be shaped to fit a range of worldviews and location-specific factors. One way to achieve this is through stakeholder collaboration (Jamal & Getz, 1995; Landorf, 2009) and participation.

Public participation in decision making process is important to allow all the parties involved to give ideas and

contribute towards exclusive partnerships to enhance productivity, especially in forest setting (Abdullah *et al.*, 1999) and to ensure a sustainable use of the park and forest. This is ever becoming more important for the natural environments as more parks and protected areas are now allowing public visitation. Many of these parks and protected areas are recognised as must-visit places in travel journals and websites. Thus, the issues in adopting the correct and rightful ways of sustainable practice become crucial. Improper or unplanned development can cause major damages to the environment. Therefore, it is now a major concern for the stakeholders to take up responsibility in engaging proper way to envision sustainability in their development plan.

Previous research and practices on the issues of application and practice of public participation have focused mainly on forest planning and environmental planning scenarios (Charles & Wilson, 2009; McCool & Guthrie, 2001; Shindler & Neburka, 1997; Yaffee *et al.*, 1997). Only limited number of research has given attention to tourism perspectives, and many of them have focused on barriers to successful participation (Aref & Gill, 2009, 2010; Mariana *et al.*, 2008; Marzuki, 2009). There is an obvious gap in investigating the attributes towards promoting successful public participation. In Malaysia, the issue of public participation in decision making has not received much attention, and the application of such practice is still at infancy stage.

Some studies conducted in a local context focussed more on barriers towards public participation. For example, a recent study by Marzuki *et al.* (2012) examined the shortcomings of public participation in tourism planning in Langkawi. Their study indicated that there were obvious limitations towards successful public participation practice in Malaysia. They concluded that inadequate information, ineffective approach and local people exclusion from participation process were some of the reasons for the failure of the practice. By taking this issue as a motivation, the present research aims to identify and determine the attributes towards enhancing public participation and may eventually result in a successful participation in tourism planning.

These attributes were constructed in two dimensions based on the findings from previous literatures (*see* McCool & Guthrie, 2001; Shindler & Neburka, 1997; Yaffee *et al.*, 1997). The first dimension is process-related, which addresses how collaboration is structured and conducted. It is important to recognise collaboration as an on-going process; therefore, the attributes that depict such a process are important to note. Gary (1989) suggested that collaboration is established for resolving existing problems and advancing shared visions. The attributes in this dimension would indicate the critical element to ensure a successful outcome from participation leading to successful results.

The second dimension is product dimension, which refers to attributes that

influence the desired outcome of any projects or developments. This dimension is critically important as it addresses how initial plan of any development projects must meet this criterion. McCool and Guthrie (2001) argued that plan must be well-written and that the preparation of the plan should be an important goal of the whole process. It is further argued that good decisions must include careful planning and environmental analysis to ensure that the decisions will lead to success. It is important for the participants to be able to acknowledge that the development plan is not only good for them, but also for their surrounding environment and that the plan is acceptable to all relevant stakeholders.

METHODS

A three-round Delphi study was conducted to assess two types of agreement among the experts in the study. The first assessment measured the extent to which these experts rated their agreement on the importance of the attributes, and they were also encouraged to list any new attributes that they felt need to be introduced in relation to the conditions in Malaysia. The second assessment investigated the extent to which the experts collectively agreed on the importance of the attributes under consideration.

The categories of agreement were referred to as 'consensus' representing the distribution of agreement by all the experts. This distinction was made as the interest of the present research was to identify the attributes that the experts collectively

rated as important for successful public participation in tourism planning in protected areas. Prior to the actual study, the questionnaire was pre-tested before commencement of Round One among the experts in the field of tourism and forestry representing both academicians and industry experts.

First Round: The first round of the research aimed to obtain experts' rating on the attributes representing both process-related and product dimensions of public participation. While many examples from the Delphi process traditionally begin with open-ended questionnaires (Gordon, 2003), using a structured questionnaire in the first round based on an extensive review of literature is also a common and acceptable modification of the Delphi process (Hsu & Sandford, 2007). This modification is considered as appropriate if basic information concerning the issue on target is available and usable (Kerlinger, 1973). As the issues of successful attributes for public participation in forest planning have been examined in a number of previous research (*see* McCool & Guthrie, 2001; Shindler & Neburka, 1997; Yaffee, *et al.*, 1997), the same kind of modification was applied in this research.

Majority of the previous research was conducted to understand factors contributing to the success of public participation in forest planning and use, which included timber, grazing, watershed, recreational, tourism, and wildlife values. Thus, the findings of

these extensive researches served as the basic information for the present research. The attributes derived from the previous research were examined carefully, and any redundancies were eliminated and regrouped accordingly. The structured questionnaire for the Delphi study contained 27 attributes in two dimensions. The attributes were presented using five-point Likert scale ranging from 1=strongly disagree to 5=strongly agree. However, to allow for new attributes to emerge under study, the experts were also encouraged to identify new attributes for this research. They might also refine the existing ones that they felt relevant to the Malaysian context.

The experts were carefully selected to represent the relevant categories of experts in the field of tourism and forestry. For this purpose, the guidelines for the experts' selection as explained by Schmidt (1997) were followed, with some modifications made to suit the research conditions. The experts in this particular study refer to the people with high ranks in relevant departments in organisations identified to have interests in tourism and protected areas management. They were individuals who would have the ability and capability to affect any decisions pertaining to sustainable development and tourism especially in protected areas in Malaysia. The organisations selected for the study were identified from the analysis of published and unpublished reports and data including government and non-governmental documents, as well

as from personal communication with the representative from the Department of Wildlife and National Parks Malaysia. There were 29 experts involved in this research.

The experts were divided into three categories: government agencies officers, members of non-governmental agencies and academics. In addition, these categories of experts were also chosen as they were believed to have important and valuable knowledge in the practice and approach of public participation for tourism planning in Malaysia. These experts were sourced from organisation charts available either online or from informal visits made to the offices. Individuals with high positions in related departments were selected as the potential respondents. For the academics

category, lecturers with related academic background or those who had produced academic papers within the subject scope of this research were selected as the potential respondents. The experts were then contacted either through telephone calls or e-mails. Upon contacting them, they were briefed on the objectives of the research and how their participation could contribute to the findings of the research. Once they had indicated their consent to participate in the study, a set of questionnaire was administered to them via e-mail or by hand. On average, the experts took one month to complete the questionnaire. The questionnaire was then submitted to the researcher for analysis purposes. Table 1 indicates the distribution of the experts based on the categories for the first round of the Delphi study.

TABLE 1
Distribution of the experts

Experts category	No. of experts	Percentage (%)
Government agencies officers	12	41.4
Members of nongovernmental agencies	6	20.7
Academics	11	37.6
Total	29	100

Second Round: In the second round, the same experts were contacted again with the second questionnaire containing the findings from the first round presented to them. They were requested to reassess and re-evaluate their feedbacks in the first round based on the findings presented. They were allowed to retain or change their answers based on their opinions. This round was aimed to ameliorate consensus

among the experts on the attributes under consideration. New attributes from the first round were also presented to the experts for rating. In the second round, however, the number of experts declined to 27. This was as a result from the analyses in the first round. The experts who were considered as outliers were excluded from the second round.

Third Round: The third round was administered to gain a better consensus among the experts. The third questionnaire containing the findings from the second round was presented, and again the experts were requested to re-assess their feedbacks. One of the experts wished not to pursue his participation in the third round due to personal reasons, leaving the number of experts to 26 people.

The data analyses for Delphi studies usually use mean, median, and standard deviation to summarise the first categories of agreement between the experts. Feedbacks from the experts were inscribed and categorised into themes. The

feedbacks describing similar attributes were gathered into one item. The analyses expounded the degree of importance for each attribute towards successful public participation. Kruskal-Wallis' one-way analysis of variance was performed to make comparison for the scores between the experts. Kendall's W (Kendall's coefficient of concordance) was used to assess agreement among the experts. This non-parametric statistic is regarded as the most widely recognised test of agreement for non-parametric rankings (Okoli & Pawlowski, 2004). Table 2 presents the interpretation of Kendall's W values.

TABLE 2

Interpretation of W value

W	Interpretation	Confidence in ranks
.1	Very weak agreement	None
.3	Weak agreement	Low
.5	Moderate agreement	Fair
.7	Strong agreement	High
.9	Unusually strong agreement	Very high

Source: Schmidt (1997)

Using Kendall's W, a realistic determination was performed to identify whether any consensus was achieved or the consensus increased from round 1 to subsequent rounds. Based on the guidelines by Schmidt (1997), once the W value has reached 0.7, a conclusion can be made if a satisfactory agreement has been achieved for the ranking phase to be considered complete.

RESULTS

The mean results for the first round are presented in Table 3. The results from this

round were analysed with the rating value for their agreement ranging from 4.7 for the highest to 3.8 for the lowest. The top three attributes were *Clearly explained outcome*, *Clearly identified objectives*, and *Agenda not influenced by politician or interest group*. The bottom three attributes were *All participants share problems*, *Development plans are politically acceptable*, and *Use of facilitators during meetings*. The mean score of ≥ 4 points indicated an agreement with the item opinion. These attributes were viewed by the experts to be significantly

important to achieve success in public participation.

In the first round, two attributes scored a 'neutral' agreement among the experts with the mean score of less than 4 points: *All participants share problems* and *Development plans are politically acceptable*. Apparently, the experts felt that sharing of problems among all the participants would not be a defining attribute for success in participation. The same finding was also obtained for ensuring

that development plans are politically acceptable. However, as these were the results from the first round, not much conclusions could be made as changes in ranking were expected in subsequent rounds. The top three attributes ranked highest in agreement indicated how the experts felt that a meeting must be properly defined to make people interested to participate. The end result of such a meeting needs to be clearly identified to keep all the participants on track of what needs to be achieved.

TABLE 3
Mean result for the first round

No.	Attribute	Mean First Round	Std. Dev.
		N=29 1=strongly disagree to 5=strongly agree	
1.	Clearly explained outcome	4.75	0.43
2.	Clearly identified objectives	4.68	0.54
3.	Agenda not influenced by politician or interest group	4.68	0.47
4.	Development plans well-implemented	4.68	0.47
5.	Leadership and dedication	4.65	0.55
6.	Sense of ownership	4.65	0.48
7.	Commitment by participant to achieve success	4.65	0.48
8.	Opportunity to learn	4.62	0.49
9.	Development plans well written	4.62	0.49
10.	Information sharing and joint fact finding	4.58	0.56
11.	Encourage communication	4.58	0.56
12.	Ensure proper concerns being heard	4.58	0.50
13.	Encourage social networking	4.58	0.50
14.	Inclusive problem solving process	4.55	0.50
15.	Ensure proper access for public	4.55	0.50
16.	Ensure inputs are reflected in document	4.55	0.50
17.	Help build relationship	4.48	0.57
18.	Ensure proper interests are represented	4.48	0.63
19.	Available current and reliable information	4.48	0.50
20.	Involved as part of responsibility	4.37	0.49
21.	Fairness to all participants	4.27	0.75
22.	Presence of management/decision maker representative	4.24	0.95
23.	Distribute materials beforehand	4.20	0.49
24.	Good interpersonal skills	4.17	0.75
25.	Use of facilitators during meetings	4.06	0.59
26.	Development plans are politically acceptable	3.96	0.56
27.	All participants share problems	3.89	0.67

The results for the second and third rounds are presented in Table 4. Results from the second round demonstrated an improvement in terms of rating value for 21 attributes. The rating values for their importance ranged between 4.92 for the highest and 3.33 for the lowest. The two top attributes in the first round persisted as the top important attributes in the second round with improvement in the rating values. This indicated that the experts gave the highest priority towards properly defined outcome and objectives to ensure a successful public participation. The third attribute was different in the results of the second round as *Agenda not influenced by politician or interest group* fell to number four and *Fairness to all participants* became the third top attributes. Five attributes however indicated a decrease between the first round and the second round. These attributes were *Involved as part of responsibility*, *Presence of management/decision makers rep*, *Distribute materials beforehand*, *Help build relationship* and *All participants share problems*. The values for these attributes slightly decreased at

minus 0.09 to 0.5 between the first round and the second round. Moreover, in the second round, the lowest attribute was at 3.33 for *All participants share problems*. This finding explains that the experts felt that problem sharing amongst all the participants was still not a defining attribute for success. One attribute, *Development plans are politically acceptable*, remained same as in the first round.

In the first round, some of the experts suggested new attributes to be considered and introduced as attributes in process dimensions. After discussions and interpretations were performed, three attributes were added to the questionnaire in the second round. These attributes were *Opportunity to be present to all*, *Content of report is easy to understand*, and *Frequent meetings and dialogue sessions*. In Table 4, these new attributes are marked with **. Next, Table 5 indicates the reasons and remarks for additions of the new attributes by the experts. The table indicates that two of the attributes scored high agreement (≥ 4 points) among the experts, while one attribute scored a neutral agreement.

TABLE 4
Mean results for the second and third rounds

No.	Attribute	Mean Second Round N=27	Std. Dev.	Mean Third Round N=26	Std. Dev.
		1=strongly disagree to 5=strongly agree		1=strongly disagree to 5=strongly agree	
1.	Clearly explained outcome	4.92	0.26	4.96	0.19
2.	Fairness to all participants	4.88	0.32	4.96	0.19
3.	Clearly identified objectives	4.85	0.36	4.96	0.19
4.	Ensure proper access for public	4.85	0.36	4.92	0.27
5.	Agenda not influenced by politician or interest group	4.81	0.39	4.92	0.27

No.	Attribute	Mean Second Round N=27 1=strongly disagree to 5=strongly agree	Std. Dev.	Mean Third Round N=26 1=strongly disagree to 5=strongly agree	Std. Dev.
6.	Development plans well-implemented	4.81	0.39	4.92	0.27
7.	Opportunity to learn	4.81	0.39	4.88	0.32
8.	Encourage social networking	4.81	0.39	4.88	0.32
9.	Leadership and dedication	4.77	0.42	4.92	0.27
10.	Sense of ownership	4.77	0.42	4.88	0.32
11.	Encourage communication	4.77	0.42	4.88	0.32
12.	Inclusive problem solving process	4.77	0.42	4.88	0.32
13.	Commitment by participant to achieve success	4.74	0.44	4.84	0.36
14..	Available current and reliable info	4.74	0.44	4.84	0.36
15.	Information sharing and joint fact finding	4.70	0.46	4.84	0.36
16.	Ensure proper concerns being heard	4.70	0.46	4.92	0.27
17.	Ensure inputs are reflected in document	4.70	0.46	4.80	0.40
18.	Ensure proper interests are represented	4.70	0.46	4.92	0.27
19.	Development plans are well-written	4.66	0.48	4.92	0.27
20.	Content easy to understand**	4.66	0.48	4.80	0.40
21.	Frequent meetings and dialogue sessions**	4.29	0.46	4.07	0.27
22.	Involved as part of responsibility	4.22	0.42	4.19	0.40
23.	Good interpersonal skills	4.22	0.42	4.15	0.36
24.	Use of facilitators during meetings	4.18	0.39	4.11	0.32
25.	Presence of management/decision maker representative	4.14	0.36	4.11	0.32
26.	Distribute materials beforehand	4.11	0.32	4.07	0.27
27.	Help build relationship	4.07	0.26	4.03	0.19
28.	Development plans are politically acceptable	3.96	0.19	4.07	0.27
29.	Opportunity to be present to all**	3.85	0.66	3.11	0.32
30.	All participants share problems	3.33	0.48	3.03	0.19

The results in the third round further showed an increase in the mean score for 21 attributes and a decrease in 9 attributes. The rating value increased significantly, with 4.96 as the highest mean value. The lowest mean value recorded a decrease from the previous round with 3.03. The

top three attributes from the second round showed an increase in mean, namely, *Clearly explained outcome*, *Clearly identified objectives*, and *Fairness to all participants*. One attribute changed from ‘neutral’ to ‘agree’ point after the third round, namely, *Development plans are*

politically acceptable. The attribute had a mean value of 3.96 in the previous round. The 9 attributes that showed a decrease were *All participants share problems*, *Involved as part of responsibility*, *Help build relationship*, *Use of facilitators during meetings*, *Distribute materials beforehand*,

Presence of management or decision maker representatives, *Opportunity to be present to all*, *Good interpersonal skills*, and *Frequent meetings and dialogue sessions*. Two of these attributes were the new attributes suggested in the first round by some of the experts.

TABLE 5
New attributes and remarks for addition into dimension

No.	Attribute	Reasons/remarks for addition
1.	Opportunities to be present to all	Opportunities to be present at planning meetings must be given to everyone and not limited to representatives. Everyone should have equal opportunities.
2.	Content easy to understand	The content of the reports/statements in meetings documents must be written in easy-to-understand language.
3.	Frequent meetings and dialogue sessions	Dialogue sessions must be done from time to time to allow public to express views and not specified to development purposes only.

Kendall's W coefficient of concordance tests were performed after each of the rounds in the Delphi study. There was no agreement between the expert panels in rating for the attributes in the first round. The Kendall W's value of 0.182 ($\chi^2=142.334$, $df=27$, $p\leq 0.001$) indicated no agreement. However, this was anticipated as it was only the first round, and the experts were yet to arrive at consensus in this stage given the conditions under which the attributes were ranked.

Improved consensus was expected in the second round when the experts were given the opportunity to reassess and re-evaluate their score based on the results in the first round. Next, in the second round, the Kendall's W coefficient of concordance improved to 0.448 ($\chi^2=350.925$, $df=29$, $p\leq 0.001$). The agreement improved from no agreement to weak agreement, based on

the interpretation from Schmidt (1997). As this was the second round, it was expected that there would be an improved consensus among the experts.

In the third round, results from the test further showed an improvement in terms of consensus level among the experts. The Kendall's W coefficient of concordance improved from 0.448 to 0.701 ($\chi^2=528.917$, $df=29$, $p\leq 0.001$) in the third round, indicating a strong consensus among the experts. Therefore, the iterative rounds of the Delphi study were considered complete when a strong consensus was finally generated from the test. A Kruskal-Wallis, which is an extension of Mann-Whitney U Test, was also performed to determine any significant differences in the agreement scores of all the attributes for the three categories of experts, namely, government agencies officers, members of

nongovernmental agencies, and academics. However, the test revealed that there were no significant differences between the three categories of experts in their agreement scores for all the attributes under these two dimensions.

DISCUSSION

This study achieved its first objective to present the extent of how the experts rated their agreement on the attributes for successful public participation. The experts agreed that the 28 attributes were very important attributes for a successful public participation for tourism planning in protected areas in Malaysia. It can be concluded that both of the dimensions were important towards achieving success in public participation.

Only two attributes were found to be not defining attributes towards ensuring success in public participation. After the three rounds, consensus improved tremendously, indicating that by using this Delphi technique, it was possible to reach consensus among the experts. This improvement practically answered the second objective of the research, which was to evaluate the extent of how experts can collectively agree on the rating of the attributes. The research also contributed new findings into the literatures by adding three new attributes, namely, the use of comprehensible language, provision of better participation opportunities, and organising frequent meetings and dialogue sessions. The three new identified attributes would supplement the existing

list of attributes used in the study. Even though one of the three attributes scored below 4 points, it remained as an important consideration for managements and stakeholders alike.

The new attributes suggested that it was very important to create awareness among the local communities on the importance of taking part in decision making process. This is probably not an easy task. However, the experts felt that properly scheduled and frequent dialogue sessions could instil interests among the public to participate. It is probably important to get the public to get used into taking part in any sessions to ensure their interests are always at par and they can effectively participate during planning and development meetings.

Another valuable attribute added by the experts namely *Content easy to understand* was very significant to Malaysian context. The issue with language use in reports by the governments has been found to be a major concern in Malaysia (Mariana *et al.*, 2008). In their study, Mariana *et al.* (2008) suggested that work must be done to improve the language and communication used in public participation to facilitate better sharing concepts and values. Therefore, the new addition of this attribute that specifically mentions this aspect is seen appropriate. This particular attribute is significant towards enhancing people's awareness to participate and is in accordance with reference to previous research. The main conclusion of the research is that there is an intense need to

discover how participation can work under certain measures and in certain conditions.

The results presented here reveal some of the conditions that need to be addressed by the respective stakeholders to ensure true participation among the public. Thus, efforts should focus primarily on increasing level of information, providing and ensuring fairness, and providing local communities with means and proper access to participate. Through such actions, the process of organising a true and authentic public participation may be significantly facilitated and thus would reveal more benefits for the public living in the protected areas.

CONCLUSION

The aim of the Delphi study was to identify the important attributes towards successful public participation. The Delphi technique, which is a qualitative research approach, was used in this exploratory study. Local experts from various disciplines related to tourism planning and park management were identified, and they participated in the three rounds of the Delphi technique. The study had successfully benefited from the effectiveness of the Delphi technique in allowing a set of people, as a group, to address a difficulty, a complicated problem (Linstone & Turoff, 1975), or lack of information about a phenomenon (Adler & Ziglio, 1996) and to finally arrive at an agreement by means of a collective human intelligence process (Linstone & Turoff, 1975). By using the Delphi technique, this research was able to identify the important

attributes to be considered in order to achieve successful public participation.

Round one started with the rating procedure. The results yielded a low level value of Kendall's W Coefficient of Concordance (0.182). This value indicated no agreement among the experts towards the attributes. In this round, the experts were encouraged to write any modifications or to even suggest new ideas with regards to the attributes that they regarded as important with reference to the local context. The results for second round showed an improvement in terms of agreement rating among the experts. There were changes in positions; however, overall, majority of the attributes showed improved mean value. The Kendall's W Coefficient of Concordance improved to 0.448. However, this value is not enough to stop the iterative process that needs a degree of consensus among the experts more than 0.7 (Schmidt, 1997). Hence, the process was continued to the third round. In this final round, the result showed an improvement to 0.701. The strong consensus indicated in the third round justified the decision to stop the iterative rounds of the Delphi study.

Overall, the research concludes that both dimensions are equally important in promoting successful public participation in protected areas. These findings are in agreement with those from some previous studies. The selected attributes for the public participation in Malaysia were priority indicators of successful public participation, comprising most of the components suggested by Yaffee *et al.*

(1997) in their summary and analysis of factors that promote bridging in ecosystem management, as well as the components suggested by McCool and Guthrie (2001).

In addition, the new attributes identified in this study are regarded as a very important contribution as these attributes are specifically related to Malaysia. The findings from the analysis are able to point out the attributes that may help relevant stakeholders to plan and execute a successful public participation in tourism planning and to encourage a true and effective public participation process.

While this research is able to identify the experts' opinions on the subject matter and allows for the new attributes to emerge, the findings from the Delphi study will be tested at a chosen protected area site. A questionnaire will be distributed to all the key persons in management, key representatives of the community, as well as the local residents. This exercise is to verify the findings from the Delphi study and to further enhance the findings of the whole research.

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